

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-33. (Canceled)

34. (Currently Amended) A method of analyzing a thought system of a subject, said subject consisting of at least one ~~individual~~; individual and said method being implemented by a computing device, the method comprising the steps of:

~~obtaining~~ inputting a plurality of items perceived by said subject into the computing device;

obtaining relationship information of all possible pairs of said items, based on perception of said subject with respect to relationship between two items of each of said all possible pairs of said items;

generating a relation matrix of the plurality of items based on said relationship information of each of said items with respect to the all other items;

transforming said relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between said items perceived by said subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space and shown on an output device,

wherein said step of obtaining relationship information further comprises the step of showing said subject only one pair of said all possible pairs of said items in order, for allowing said individual to assign said relationship information for each pair of said items, in the same order.

35. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said items are represented by language.

36. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said items belong to a single group conceptually undistinguishable.

37. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said step of obtaining items is executed to obtain about 5 - 20 items.

DI 38. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said step of obtaining said plurality of items is arranged to obtain successively said items from said subject, while all of said items previously obtained are shown to said subject.

39. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said relationship information consists of rating of relationship between said two items of each of said all possible pairs of said items.

40. (Previously Presented) A method of analyzing a thought system of a subject according to claim 39, wherein said rating of relationship consists of a plurality of rating concepts representing different degrees of said relationship.

41. (Previously Presented) A method of analyzing a thought system of a subject according to claim 40, wherein said plurality of rating concepts comprise "small", "medium" and "large."

42. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, further comprising the step of detecting a unique item having no relationship to all other items based on said relationship information, and deleting said unique item from said items so as to regenerate said relation matrix.

43. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, further comprising the steps of determining whether said relationship information is biased, and displaying a warning to said subject if said relationship information is biased, while comprising the step of initializing said step of obtaining said relationship information so as to recommence said step of obtaining said relationship information, as needed.

44. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said items perceived by said subject are qualitative data, while said relationship information are processed as quantitative data in said step of transforming said relation matrix to said display matrix.

45. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein order of showing said one pair of items of said all possible pairs is arranged to avoid repetition of each item in consecutive pairs.

46. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said step of obtaining said plurality of items and said step of obtaining said relationship information are performed successively by said individuals in a substantially continuous time.

47. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said step of generating said relation matrix is arranged for generating said relation matrix by using values of said relationship information, said relationship information being assigned to each of said items for representing the relationship with respect to said all other items, and being set to respective elements of said relation matrix.

48. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, further comprising a step of generating a profile matrix by dividing

each element of said relation matrix by a sum of said elements of said relationship matrix, and a step of generating a transformed matrix by transforming said profile matrix based on deviation of each element of said profile matrix from the corresponding expectation of said each element of said profile matrix, said steps of generating said profile matrix and transforming said profile matrix are performed as pretreatment of transforming said relationship matrix to said display matrix.

49. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, said step of transforming said relation matrix to said display matrix, comprising a step of performing a singular value decomposition.

DI 50. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, further comprising a step of arranging said display matrix such that values of elements of said display matrix to be weighted with respect to a specific dimension.

51. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said representation space consists of a two or three dimensional coordinate domain, and said step of displaying said items is arranged for plotting items on a corresponding position in said coordinate domain, according to said display matrix.

52. (Previously Presented) A method of analyzing a thought system of a subject according to claim 51, wherein each of said items plotted on said coordinate domain is depicted by an object the size of which corresponds to the value of relativity of said item with respect to the all other items.

53. (Previously Presented) A method of analyzing a thought system of a subject according to claim 51, wherein each of said items plotted on said coordinate domain is depicted by an object the size of which corresponds to a value of relativity of said item with respect to one of said dimension axis.

54. (Previously Presented) A method of analyzing thoughts of at least one individual according to claim 34, wherein said step of transforming said relation matrix to said display matrix further comprises the step of storing a data of said display matrix.

55. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, further comprises the step of performing a cluster analysis using said display matrix, so as to separate said items into groups, the number of said groups being smaller than the total number of said items.

DI 56. (Previously Presented) A method of analyzing a thought system of a subject, according to claim 34, wherein said subject consists of a plurality of individuals, said step of obtaining said plurality of items is performed for obtaining a plurality of items commonly perceived by said plurality of individuals, said step of obtaining relationship information is separately performed by said plurality of individuals for obtaining a plurality sets of relationship information based on perceptions of each of said individuals with respect to all possible pairs of said items, and said step of generating a relation matrix is performed for generating a aggregated relation matrix for said subject, by summing up said plurality sets of relation matrixes of said plurality of individuals.

57. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said subject consists of a plurality of individuals, and said step of obtaining said relation matrix is performed by said plurality of individuals such that said plurality of individuals share all possible pairs of said items to assign said relationship information to said all possible pairs of items.

58. (Previously Presented) A method of analyzing a thought system of a subject according to claim 34, wherein said subject consists of a plurality of individuals, said step of obtaining said plurality of items is performed for obtaining a plurality of items commonly perceived by said plurality of individuals, said step of obtaining relationship information is

separately performed by said plurality of individuals for obtaining a plurality sets of relationship information based on perceptions of each of said individuals with respect to all possible pairs of said items, said step of generating a relation matrix is performed for generating a plurality of relation matrixes based on said plurality sets of relationship information, and for generating a juxtaposition relation matrix wherein said plurality of relation matrixes are juxtaposed; said step of transforming said relation matrix is performed for transforming said juxtaposing matrix to said display matrix, and said step of displaying said display matrix is performed for plotting said items on respective positions of said representation space according to said plurality of relation matrixes for the respective individuals, and indicating the positional differences between said items obtained by one of said plurality of individuals and said items obtained by another of said plurality of individuals.

59. (Previously Presented) A method of analyzing a thought system of a subject, said subject consisting of at least one individual, comprising the steps of:

a first step of analyzing said thought system arranged for performing said analyzing methods recited in claim 34;

a second step of analyzing said thought system arranged for performing steps of selecting at least one of said items obtained in said first step, obtaining a plurality of items perceived by said subject with respect to said selected items, and analyzing said plurality of items according to said analyzing methods.

60. (Currently Amended) A method of analyzing a thought system of a subject, said subject consisting of at least one individual and said method being implemented by a computing device, the method comprising the steps of:

obtaining-inputting a plurality of items perceived by said subject into the computing device;

obtaining relationship information of all possible pairs of said items, based on perception of said subject with respect to relationship between two items of each of said all possible pairs of said items;

generating a relation matrix of the plurality of items based on said relationship information of each of said items with respect to the all other items;

transforming said relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between said items perceived by said subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space and shown on an output device,

wherein said items perceived by said subject are qualitative data, while said relationship information are processed as quantitative data in said step of transforming said relation matrix to said display matrix.

61. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, wherein said items are represented by language.

62. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, wherein said items belong to a single group conceptually undistinguishable.

63. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, wherein said step of obtaining items is executed to obtain about 5 - 20 items.

64. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, wherein said step of obtaining said plurality of items is arranged to

obtain successively said items from said subject, while all of said items previously obtained are shown to said subject.

65. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, said step of obtaining relationship information further comprising the step of showing said subject only one pair of said all possible pairs of said items in order, for allowing said individual to assign said relationship information for each pair of said items, in the same order.

DI 66. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, wherein said relationship information consists of rating of relationship between said two items of each of said all possible pairs of said items.

67. (Previously Presented) A method of analyzing a thought system of a subject according to claim 66, wherein said rating of relationship consists of a plurality of rating concepts representing different degrees of said relationship.

68. (Previously Presented) A method of analyzing a thought system of a subject according to claim 67, wherein said plurality of rating concepts comprise "small", "medium" and "large."

69. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, further comprising the step of detecting a unique item having no relationship to all other items based on said relationship information, and deleting said unique item from said items so as to regenerate said relation matrix.

70. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, further comprising the steps of determining whether said relationship information is biased, and displaying a warning to said subject if said relationship information is biased, while comprising the step of initializing said step of obtaining said relationship



information so as to recommence said step of obtaining said relationship information, as needed.

71. (Previously Presented) A method of analyzing a thought system of a subject according to claim 65, wherein order of showing said one pair of items of said all possible pairs is arranged to avoid repetition of each item in consecutive pairs.

72. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, wherein said step of obtaining said plurality of items and said step of obtaining said relationship information are performed successively by said individuals in a substantially continuous time.

73. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, wherein said step of generating said relation matrix is arranged for generating said relation matrix by using values of said relationship information, said relationship information being assigned to each of said items for representing the relationship with respect to said all other items, and being set to respective elements of said relation matrix.

74. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, further comprising a step of generating a profile matrix by dividing each element of said relation matrix by a sum of said elements of said relationship matrix, and a step of generating a transformed matrix by transforming said profile matrix based on deviation of each element of said profile matrix from the corresponding expectation of said each element of said profile matrix, said steps of generating said profile matrix and transforming said profile matrix are performed as pretreatment of transforming said relationship matrix to said display matrix.

75. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, said step of transforming said relation matrix to said display matrix, comprising a step of performing a singular value decomposition.

76. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, further comprising a step of arranging said display matrix such that values of elements of said display matrix to be weighted with respect to a specific dimension.

77. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, wherein said representation space consists of a two or three dimensional coordinate domain, and said step of displaying said items is arranged for plotting items on a corresponding position in said coordinate domain, according to said display matrix.

78. (Previously Presented) A method of analyzing a thought system of a subject according to claim 77, wherein each of said items plotted on said coordinate domain is depicted by an object the size of which corresponds to the value of relativity of said item with respect to the all other items.

79. (Previously Presented) A method of analyzing a thought system of a subject according to claim 78, wherein each of said items plotted on said coordinate domain is depicted by an object the size of which corresponds to a value of relativity of said item with respect to one of said dimension axis.

80. (Previously Presented) A method of analyzing thoughts of at least one individual according to claim 60, wherein said step of transforming said relation matrix to said display matrix further comprises the step of storing a data of said display matrix.

81. (Previously Presented) A method of analyzing a thought system of according to claim 60, further comprises the step of performing a cluster analysis using said display

matrix, so as to separate said items into groups, the number of said groups being smaller than the total number of said items.

82. (Previously Presented) A method of analyzing a thought system of a subject, according to claim 60, wherein said subject consists of a plurality of individuals, said step of obtaining said plurality of items is performed for obtaining a plurality of items commonly perceived by said plurality of individuals, said step of obtaining relationship information is separately performed by said plurality of individuals for obtaining a plurality sets of relationship information based on perceptions of each of said individuals with respect to all possible pairs of said items, and said step of generating a relation matrix is performed for generating a aggregated relation matrix for said subject, by summing up said plurality sets of relation matrixes of said plurality of individuals.

83. (Previously Presented) A method of analyzing a thought system of a subject according to claims 60, wherein said subject consists of a plurality of individuals, and said step of obtaining said relation matrix is performed by said plurality of individuals such that said plurality of individuals share all possible pairs of said items to assign said relationship information to said all possible pairs of items.

84. (Previously Presented) A method of analyzing a thought system of a subject according to claim 60, wherein said subject consists of a plurality of individuals, said step of obtaining said plurality of items is performed for obtaining a plurality of items commonly perceived by said plurality of individuals, said step of obtaining relationship information is separately performed by said plurality of individuals for obtaining a plurality sets of relationship information based on perceptions of each of said individuals with respect to all possible pairs of said items, said step of generating a relation matrix is performed for generating a plurality of relation matrixes based on said plurality sets of relationship information, and for generating a juxtaposition relation matrix wherein said plurality of

relation matrixes are juxtaposed; said step of transforming said relation matrix is performed for transforming said juxtaposing matrix to said display matrix, and said step of displaying said display matrix is performed for plotting said items on respective positions of said representation space according to said plurality of relation matrixes for the respective individuals, and indicating the positional differences between said items obtained by one of said plurality of individuals and said items obtained by another of said plurality of individuals.

85. (Previously Presented) A method of analyzing a thought system of a subject, said subject consisting of at least one individual, comprising the steps of:

DI a first step of analyzing said thought system arranged for performing said analyzing methods recited in claim 60;

a second step of analyzing said thought system arranged for performing steps of selecting at least one of said items obtained in said first step, obtaining a plurality of items perceived by said subject with respect to said selected items, and analyzing said plurality of items according to said analyzing methods.

86. (Currently Amended) A method of analyzing a thought system of a subject, said subject consisting of at least one individual and said method being implemented by a computing device, the method comprising the steps of:

~~obtaining~~ inputting a plurality of items perceived by said subject into a computing device;

obtaining relationship information of all possible pairs of said items, based on perception of said subject with respect to relationship between two items of each of said all possible pairs of said items;

generating a relation matrix of the plurality of items based on said relationship information of each of said items with respect to the all other items;

transforming said relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between said items perceived by said subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space and shown on an output device,

wherein said step of generating said relation matrix is arranged for generating said relation matrix by using values of said relationship information, said relationship information being assigned to each of said items for representing the relationship with respect to said all other items, and being set to respective elements of said relation matrix.

87. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said items are represented by language.

88. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said items belong to a single group conceptually undistinguishable.

89. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said step of obtaining items is executed to obtain about 5 - 20 items.

90. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said step of obtaining said plurality of items is arranged to obtain successively said items from said subject, while all of said items previously obtained are shown to said subject.

91. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, said step of obtaining relationship information further comprising the step of showing said subject only one pair of said all possible pairs of said items in order, for

allowing said individual to assign said relationship information for each pair of said items, in the same order.

92. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said relationship information consists of rating of relationship between said two items of each of said all possible pairs of said items.

93. (Previously Presented) A method of analyzing a thought system of a subject according to claim 92, wherein said rating of relationship consists of a plurality of rating concepts representing different degrees of said relationship.

94. (Previously Presented) A method of analyzing a thought system of a subject according to claim 93, wherein said plurality of rating concepts comprise "small", "medium" and "large."

95. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, further comprising the step of detecting a unique item having no relationship to all other items based on said relationship information, and deleting said unique item from said items so as to regenerate said relation matrix.

96. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, further comprising the steps of determining whether said relationship information is biased, and displaying a warning to said subject if said relationship information is biased, while comprising the step of initializing said step of obtaining said relationship information so as to recommence said step of obtaining said relationship information, as needed.

97. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said items perceived by said subject are qualitative data, while said relationship information are processed as quantitative data in said step of transforming said relation matrix to said display matrix.

98. (Previously Presented) A method of analyzing a thought system of a subject according to claim 91, wherein order of showing said one pair of items of said all possible pairs is arranged to avoid repetition of each item in consecutive pairs.

99. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said step of obtaining said plurality of items and said step of obtaining said relationship information are performed successively by said individuals in a substantially continuous time.

100. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, further comprising a step of generating a profile matrix by dividing each element of said relation matrix by a sum of said elements of said relationship matrix, and a step of generating a transformed matrix by transforming said profile matrix based on deviation of each element of said profile matrix from the corresponding expectation of said each element of said profile matrix, said steps of generating said profile matrix and transforming said profile matrix are performed as pretreatment of transforming said relationship matrix to said display matrix.

101. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, said step of transforming said relation matrix to said display matrix, comprising a step of performing a singular value decomposition.

102. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, further comprising a step of arranging said display matrix such that values of elements of said display matrix to be weighted with respect to a specific dimension .

103. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said representation space consists of a two or three dimensional coordinate domain, and said step of displaying said items is arranged for plotting

items on a corresponding position in said coordinate domain, according to said display matrix.

104. (Previously Presented) A method of analyzing a thought system of a subject according to claim 103, wherein each of said items plotted on said coordinate domain is depicted by an object the size of which corresponds to the value of relativity of said item with respect to the all other items.

105. (Previously Presented) A method of analyzing a thought system of a subject according to claim 103, wherein each of said items plotted on said coordinate domain is depicted by an object the size of which corresponds to a value of relativity of said item with respect to one of said dimension axis.

DI 106. (Previously Presented) A method of analyzing thoughts of at least one individual according to claim 86, wherein said step of transforming said relation matrix to said display matrix further comprises the step of storing a data of said display matrix.

107. (Previously Presented) A method of analyzing a thought system of according to claim 86, further comprises the step of performing a cluster analysis using said display matrix, so as to separate said items into groups, the number of said groups being smaller than the total number of said items.

108. (Previously Presented) A method of analyzing a thought system of a subject, according to claim 86, wherein said subject consists of a plurality of individuals, said step of obtaining said plurality of items is performed for obtaining a plurality of items commonly perceived by said plurality of individuals, said step of obtaining relationship information is separately performed by said plurality of individuals for obtaining a plurality sets of relationship information based on perceptions of each of said individuals with respect to all possible pairs of said items, and said step of generating a relation matrix is performed for



generating a aggregated relation matrix for said subject, by summing up said plurality sets of relation matrixes of said plurality of individuals.

109. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said subject consists of a plurality of individuals, and said step of obtaining said relation matrix is performed by said plurality of individuals such that said plurality of individuals share all possible pairs of said items to assign said relationship information to said all possible pairs of items.

110. (Previously Presented) A method of analyzing a thought system of a subject according to claim 86, wherein said subject consists of a plurality of individuals, said step of obtaining said plurality of items is performed for obtaining a plurality of items commonly perceived by said plurality of individuals, said step of obtaining relationship information is separately performed by said plurality of individuals for obtaining a plurality sets of relationship information based on perceptions of each of said individuals with respect to all possible pairs of said items, said step of generating a relation matrix is performed for generating a plurality of relation matrixes based on said plurality sets of relationship information, and for generating a juxtaposition relation matrix wherein said plurality of relation matrixes are juxtaposed; said step of transforming said relation matrix is performed for transforming said juxtaposing matrix to said display matrix, and said step of displaying said display matrix is performed for plotting said items on respective positions of said representation space according to said plurality of relation matrixes for the respective individuals, and indicating the positional differences between said items obtained by one of said plurality of individuals and said items obtained by another of said plurality of individuals.

111. (Previously Presented) A method of analyzing a thought system of a subject, said subject consisting of at least one individual, comprising the steps of:

a first step of analyzing said thought system arranged for performing said analyzing methods recited in claim 86;

a second step of analyzing said thought system arranged for performing steps of selecting at least one of said items obtained in said first step, obtaining a plurality of items perceived by said subject with respect to said selected items, and analyzing said plurality of items according to said analyzing methods.

112. (Currently Amended) A method of analyzing a thought system of a subject, said subject consisting of at least one individual and being implemented by a computing device, comprising the steps of:

~~obtaining~~ inputting a plurality of items perceived by said subject into the computing device;

obtaining relationship information of all possible pairs of said items, based on perception of said subject with respect to relationship between two items of each of said all possible pairs of said items;

generating a relation matrix of the plurality of items based on said relationship information of each of said items with respect to the all other items;

transforming said relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between said items perceived by said subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space and shown on an output device,

wherein said representation space consists of a two or three dimensional coordinate domain, and said step of displaying said items is arranged for plotting items on a corresponding position in said coordinate domain, according to said display matrix.

113. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said items are represented by language.

114. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said items belong to a single group conceptually undistinguishable.

115. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said step of obtaining items is executed to obtain about 5 - 20 items.

D 116. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said step of obtaining said plurality of items is arranged to obtain successively said items from said subject, while all of said items previously obtained are shown to said subject.

117. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, said step of obtaining relationship information further comprising the step of showing said subject only one pair of said all possible pairs of said items in order, for allowing said individual to assign said relationship information for each pair of said items, in the same order.

118. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said relationship information consists of rating of relationship between said two items of each of said all possible pairs of said items.

119. (Previously Presented) A method of analyzing a thought system of a subject according to claim 118, wherein said rating of relationship consists of a plurality of rating concepts representing different degrees of said relationship.

120. (Previously Presented) A method of analyzing a thought system of a subject

according to claim 119, wherein said plurality of rating concepts comprise “small”, “medium” and “large”.

121. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, further comprising the step of detecting a unique item having no relationship to all other items based on said relationship information, and deleting said unique item from said items so as to regenerate said relation matrix.

122. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, further comprising the steps of determining whether said relationship information is biased, and displaying a warning to said subject if said relationship information is biased, while comprising the step of initializing said step of obtaining said relationship information so as to recommence said step of obtaining said relationship information, as needed.

123. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said items perceived by said subject are qualitative data, while said relationship information are processed as quantitative data in said step of transforming said relation matrix to said display matrix.

124. (Previously Presented) A method of analyzing a thought system of a subject according to claim 117, wherein order of showing said one pair of items of said all possible pairs is arranged to avoid repetition of each item in consecutive pairs.

125. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said step of obtaining said plurality of items and said step of obtaining said relationship information are performed successively by said individuals in a substantially continuous time.

126. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said step of generating said relation matrix is arranged for

generating said relation matrix by using values of said relationship information, said relationship information being assigned to each of said items for representing the relationship with respect to said all other items, and being set to respective elements of said relation matrix.

01 127. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, further comprising a step of generating a profile matrix by dividing each element of said relation matrix by a sum of said elements of said relationship matrix, and a step of generating a transformed matrix by transforming said profile matrix based on deviation of each element of said profile matrix from the corresponding expectation of said each element of said profile matrix, said steps of generating said profile matrix and transforming said profile matrix are performed as pretreatment of transforming said relationship matrix to said display matrix.

128. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, said step of transforming said relation matrix to said display matrix, comprising a step of performing a singular value decomposition.

129. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, further comprising a step of arranging said display matrix such that values of elements of said display matrix to be weighted with respect to a specific dimension.

130. (Previously Presented) A method of analyzing a thought system of a subject according to claim 129, wherein each of said items plotted on said coordinate domain is depicted by an object the size of which corresponds to the value of relativity of said item with respect to the all other items.

131. (Previously Presented) A method of analyzing a thought system of a subject according to claim 129, wherein each of said items plotted on said coordinate domain is

depicted by an object the size of which corresponds to a value of relativity of said item with respect to one of said dimension axis.

132. (Previously Presented) A method of analyzing thoughts of at least one individual according to claim 112, wherein said step of transforming said relation matrix to said display matrix further comprises the step of storing a data of said display matrix.

133. (Previously Presented) A method of analyzing a thought system of according to claim 112, further comprises the step of performing a cluster analysis using said display matrix, so as to separate said items into groups, the number of said groups being smaller than the total number of said items.

DI 134. (Previously Presented) A method of analyzing a thought system of a subject, according to claim 112, wherein said subject consists of a plurality of individuals, said step of obtaining said plurality of items is performed for obtaining a plurality of items commonly perceived by said plurality of individuals, said step of obtaining relationship information is separately performed by said plurality of individuals for obtaining a plurality sets of relationship information based on perceptions of each of said individuals with respect to all possible pairs of said items, and said step of generating a relation matrix is performed for generating a aggregated relation matrix for said subject, by summing up said plurality sets of relation matrixes of said plurality of individuals.

135. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said subject consists of a plurality of individuals, and said step of obtaining said relation matrix is performed by said plurality of individuals such that said plurality of individuals share all possible pairs of said items to assign said relationship information to said all possible pairs of items.

136. (Previously Presented) A method of analyzing a thought system of a subject according to claim 112, wherein said subject consists of a plurality of individuals, said step of

obtaining said plurality of items is performed for obtaining a plurality of items commonly perceived by said plurality of individuals, said step of obtaining relationship information is separately performed by said plurality of individuals for obtaining a plurality sets of relationship information based on perceptions of each of said individuals with respect to all possible pairs of said items, said step of generating a relation matrix is performed for generating a plurality of relation matrixes based on said plurality sets of relationship information, and for generating a juxtaposition relation matrix wherein said plurality of relation matrixes are juxtaposed; said step of transforming said relation matrix is performed for transforming said juxtaposing matrix to said display matrix, and said step of displaying said display matrix is performed for plotting said items on respective positions of said representation space according to said plurality of relation matrixes for the respective individuals, and indicating the positional differences between said items obtained by one of said plurality of individuals and said items obtained by another of said plurality of individuals.

137. (Previously Presented) A method of analyzing a thought system of a subject, said subject consisting of at least one individual, comprising the steps of:

a first step of analyzing said thought system arranged for performing said analyzing methods recited in claim 112;

a second step of analyzing said thought system arranged for performing steps of selecting at least one of said items obtained in said first step, obtaining a plurality of items perceived by said subject with respect to said selected items, and analyzing said plurality of items according to said analyzing methods.

138. (Currently Amended) An analyzing apparatus for analyzing a thought system of a subject, said subject consisting of at least one individual, comprising:

a first input device being arranged to input a plurality of items perceived by said subject;

a second input device being arranged to input a relationship information between two items of each of all possible pairs of said plurality of items, according to perception of said subject with respect to said relation rating;

a relation matrix generator adapted to generate a relation matrix based on said relationship information of each of said items with respect to the others of said items;

DI a display matrix generator adapted to transform said relation matrix into said display matrix projected on a representation space having dimension lower than the number of said items, said representation space reflecting a relationship between said items perceived by said subject;

a display device adapted to display said items in said representation space such that said items are plotted on respective positions in said representation according to said display matrix; and

an external display device being arranged for visually showing said representation space in the form of two or three dimensional coordinates in which said items are plotted in the respective coordinates,

wherein the relation matrix generator and display matrix generator are implemented by a computer system, and the first and second input devices are coupled to the computer system.

139. (Currently Amended) An analyzing apparatus according to claim 138, wherein said second input device being arranged to input said relationship information consists of a plurality of terminal units connected to said analyzing apparatus via a telecommunication



network, so as to allow said individual to input said relationship information by one of said terminal-~~unit~~-units.

140. (Previously Presented) A computer program product for analyzing a thought system of a subject by using a plurality of items perceived by said subject, said subject consisting of at least one individual, said computer program comprising:

computer code that relates each of said items to all other items, using a rating of relationship on several levels;

computer code that generate a relation matrix using said obtained relation ratings;

DI computer code that performs a multivariate analysis on said relation matrix so as to transform said relation matrix to a display matrix;

computer code that display the all items on respective position of a representation space according to said display matrix;

computer code that display only one pair of said all possible pairs of said items in order, for allowing said individual to assign said relationship information for each pair of said items, in the same order; and

a computer-readable medium that stores the program codes.

141. (Previously Presented) A computer program product for analyzing a thought system of a subject by using a plurality of items perceived by said subject, said subject consisting of at least one individual, said computer program comprising:

computer code that relates each of said items to all other items, using a rating of relationship on several levels;

computer code that generate a relation matrix using said obtained relation ratings;

computer code that performs a multivariate analysis on said relation matrix so as to transform said relation matrix to a display matrix;

computer code that display the all items on respective position of a representation space according to said display matrix;

computer code that display only one pair of said all possible pairs of said items in order, for allowing said individual to assign said relationship information for each pair of said items, in the same order; and

a computer-readable medium that stores the program codes, wherein the computer code performs a method defined in claim 35.

142. (Previously Presented) A computer program product for analyzing a thought system of a subject by using a plurality of items perceived by said subject, said subject consisting of at least one individual, said computer program comprising:

computer code that relates each of said items to all other items, using a rating of relationship on several levels;

computer code that generate a relation matrix using said obtained relation ratings;

computer code that performs a multivariate analysis on said relation matrix so as to transform said relation matrix to a display matrix;

computer code that display the all items on respective position of a representation space according to said display matrix;

computer code that represent said items perceived by said subject as qualitative data, and process said relation ratings as quantitative data in order to transform said relation matrix to said display matrix; and

a computer-readable medium that stores the program codes.

143. (Previously Presented) A computer program product for analyzing a thought system of a subject by using a plurality of items perceived by said subject, said subject consisting of at least one individual, said computer program comprising:

computer code that relates each of said items to all other items, using a rating of relationship on several levels;

computer code that generate a relation matrix using said obtained relation ratings;

computer code that performs a multivariate analysis on said relation matrix so as to transform said relation matrix to a display matrix;

computer code that display the all items on respective position of a representation space according to said display matrix;

computer code that represent said items perceived by said subject as qualitative data, and process said relation ratings as quantitative data in order to transform said relation matrix to said display matrix; and

a computer-readable medium that stores the program codes, wherein the computer code performs a method defined in claim 61.

144. (Previously Presented) A computer program product for analyzing a thought system of a subject by using a plurality of items perceived by said subject, said subject consisting of at least one individual, said computer program comprising:

computer code that relates each of said items to all other items, using a rating of relationship on several levels;

computer code that generate a relation matrix using values of said obtained relation ratings being assigned to each of said items for representing the relationship with respect to said all other items, and being set to respective elements of said relation matrix;

computer code that performs a multivariate analysis on said relation matrix so as to transform said relation matrix to a display matrix;

computer code that display the all items on respective position of a representation space according to said display matrix; and

a computer-readable medium that stores the program codes.

145. (Previously Presented) A computer program product for analyzing a thought system of a subject by using a plurality of items perceived by said subject, said subject consisting of at least one individual, said computer program comprising:

computer code that relates each of said items to all other items, using a rating of relationship on several levels;

computer code that generate a relation matrix using values of said obtained relation ratings being assigned to each of said items for representing the relationship with respect to said all other items, and being set to respective elements of said relation matrix;

computer code that performs a multivariate analysis on said relation matrix so as to transform said relation matrix to a display matrix;

computer code that display the all items on respective position of a representation space according to said display matrix; and

a computer-readable medium that stores the program codes, wherein the computer code performs a method defined in claim 87.

146. (Previously Presented) A computer program product for analyzing a thought system of a subject by using a plurality of items perceived by said subject, said subject consisting of at least one individual, said computer program comprising:

computer code that relates each of said items to all other items, using a rating of relationship on several levels;

computer code that generate a relation matrix using said obtained relation ratings;

computer code that performs a multivariate analysis on said relation matrix so as to transform said relation matrix to a display matrix;

computer code that display the all items on respective position of a representation space consisting of a two or three dimensional coordinate domain according to said display matrix by plotting items on a corresponding position in said coordinate domain; and

a computer-readable medium that stores the program codes.

147. (Previously Presented) A computer program product for analyzing a thought system of a subject by using a plurality of items perceived by said subject, said subject consisting of at least one individual, said computer program comprising:

computer code that relates each of said items to all other items, using a rating of relationship on several levels;

computer code that generate a relation matrix using said obtained relation ratings;

computer code that performs a multivariate analysis on said relation matrix so as to transform said relation matrix to a display matrix;

computer code that display the all items on respective position of a representation space consisting of a two or three dimensional coordinate domain according to said display matrix by plotting items on a corresponding position in said coordinate domain; and

a computer-readable medium that stores the program codes, wherein the computer code performs a method defined in claim 113.

148. (Previously Presented) A computer program data signal for analyzing a thought system of a subject consisting of at least one individual, said computer program data signal embodied in a telecommunication medium and representing sequences of instructions which, when executed by a processor, cause the processor to perform the steps of:

obtaining a plurality of items perceived by said subject;

obtaining relationship information of all possible pairs of said items, based on perception of the subject with respect to relationship between two items of each of said all possible pairs of the items;

generating a relation matrix of said plurality of items based on said relation information of each of said items with respect to said all other items;

transforming the relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between the items perceived by the subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space,

wherein said step of obtaining relationship information further comprises the step of showing said subject only one pair of said all possible pairs of said items in order, for allowing said individual to assign said relationship information for each pair of said items, in the same order.

DI 149. (Previously Presented) A computer program data signal for analyzing a thought system of a subject consisting of at least one individual, said computer program data signal embodied in a telecommunication medium and representing sequences of instructions which, when executed by a processor, cause the processor to perform the steps of:

obtaining a plurality of items perceived by said subject;

obtaining relationship information of all possible pairs of said items, based on perception of the subject with respect to relationship between two items of each of said all possible pairs of the items;

generating a relation matrix of said plurality of items based on said relation information of each of said items with respect to said all other items;

transforming the relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between the items perceived by the subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space,

wherein said step of obtaining relationship information further comprises the step of showing said subject only one pair of said all possible pairs of said items in order, for allowing said individual to assign said relationship information for each pair of said items, in the same order, wherein the executed sequences of instructions cause the processor to further perform the step defined in claim 35.

150. (Previously Presented) A computer program data signal for analyzing a thought system of a subject consisting of at least one individual, said computer program data signal embodied in a telecommunication medium and representing sequences of instructions which, when executed by a processor, cause the processor to perform the steps of:

obtaining a plurality of items perceived by said subject;

obtaining relationship information of all possible pairs of said items, based on perception of the subject with respect to relationship between two items of each of said all possible pairs of the items;

generating a relation matrix of said plurality of items based on said relation information of each of said items with respect to said all other items;

transforming the relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between the items perceived by the subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space,

wherein said items perceived by said subject are qualitative data, while said relationship information are processed as quantitative data in said step of transforming said relation matrix to said display matrix.

151. (Previously Presented) A computer program data signal for analyzing a thought system of a subject consisting of at least one individual, said computer program data

signal embodied in a telecommunication medium and representing sequences of instructions which, when executed by a processor, cause the processor to perform the steps of:

obtaining a plurality of items perceived by said subject;

obtaining relationship information of all possible pairs of said items, based on perception of the subject with respect to relationship between two items of each of said all possible pairs of the items;

generating a relation matrix of said plurality of items based on said relation information of each of said items with respect to said all other items;

transforming the relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between the items perceived by the subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space,

wherein said items perceived by said subject are qualitative data, while said relationship information are processed as quantitative data in said step of transforming said relation matrix to said display matrix, wherein the executed sequences of instructions cause the processor to further perform the step defined in claim 61.

152. (Previously Presented) A computer program data signal for analyzing a thought system of a subject consisting of at least one individual, said computer program data signal embodied in a telecommunication medium and representing sequences of instructions which, when executed by a processor, cause the processor to perform the steps of:

obtaining a plurality of items perceived by said subject;

obtaining relationship information of all possible pairs of said items, based on perception of the subject with respect to relationship between two items of each of said all possible pairs of the items;



generating a relation matrix of said plurality of items based on said relation information of each of said items with respect to said all other items;

transforming the relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between the items perceived by the subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space,

wherein said step of generating said relation matrix is arranged for generating said relation matrix by using values of said relationship information, said relationship information being assigned to each of said items for representing the relationship with respect to said all other items, and being set to respective elements of said relation matrix.

153. (Previously Presented) A computer program data signal for analyzing a thought system of a subject consisting of at least one individual, said computer program data signal embodied in a telecommunication medium and representing sequences of instructions which, when executed by a processor, cause the processor to perform the steps of:

obtaining a plurality of items perceived by said subject;

obtaining relationship information of all possible pairs of said items, based on perception of the subject with respect to relationship between two items of each of said all possible pairs of the items;

generating a relation matrix of said plurality of items based on said relation information of each of said items with respect to said all other items;

transforming the relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between the items perceived by the subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space,

wherein said step of generating said relation matrix is arranged for generating said relation matrix by using values of said relationship information, said relationship information being assigned to each of said items for representing the relationship with respect to said all other items, and being set to respective elements of said relation matrix, wherein the executed sequences of instructions cause the processor to further perform the step defined in claim 87.

154. (Previously Presented) A computer program data signal for analyzing a thought system of a subject consisting of at least one individual, said computer program data signal embodied in a telecommunication medium and representing sequences of instructions which, when executed by a processor, cause the processor to perform the steps of:

obtaining a plurality of items perceived by said subject;

obtaining relationship information of all possible pairs of said items, based on perception of the subject with respect to relationship between two items of each of said all possible pairs of the items;

generating a relation matrix of said plurality of items based on said relation information of each of said items with respect to said all other items;

transforming the relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between the items perceived by the subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space,

wherein said representing space consists of a two or three dimensional coordinate domain, and said step of displaying said items is arranged for plotting items on a corresponding position in said coordinate domain, according to said display matrix.

155. (Previously Presented) A computer program data signal for analyzing a thought system of a subject consisting of at least one individual, said computer program data signal embodied in a telecommunication medium and representing sequences of instructions which, when executed by a processor, cause the processor to perform the steps of:

obtaining a plurality of items perceived by said subject;

obtaining relationship information of all possible pairs of said items, based on perception of the subject with respect to relationship between two items of each of said all possible pairs of the items;

generating a relation matrix of said plurality of items based on said relation information of each of said items with respect to said all other items;

transforming the relation matrix to a display matrix projected on a representation space having dimensions lower than the number of said items and reflecting a relationship between the items perceived by the subject; and

displaying said items on said representation space according to said display matrix such that said items are plotted on respective positions in said representation space,

wherein said representing space consists of a two or three dimensional coordinate domain, and said step of displaying said items is arranged for plotting items on a corresponding position in said coordinate domain, according to said display matrix, wherein the executed sequences of instructions cause the processor to further perform the step defined in claim 113.

156. (Previously Presented) A method of forming an analyzing apparatus for analyzing a thought system of a subject as defined in claim 138, said apparatus including a computer device having a processor, said method comprising the step of:

transmitting a computer program data signal readable by said computer device to said computer device via a telecommunication medium so that said computer device

functions as said analyzing apparatus.

157. (New) The analyzing apparatus according to claim 138, wherein the first input device and second input device are the same device.

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